

[Document Name] Drawings

Fig. 1

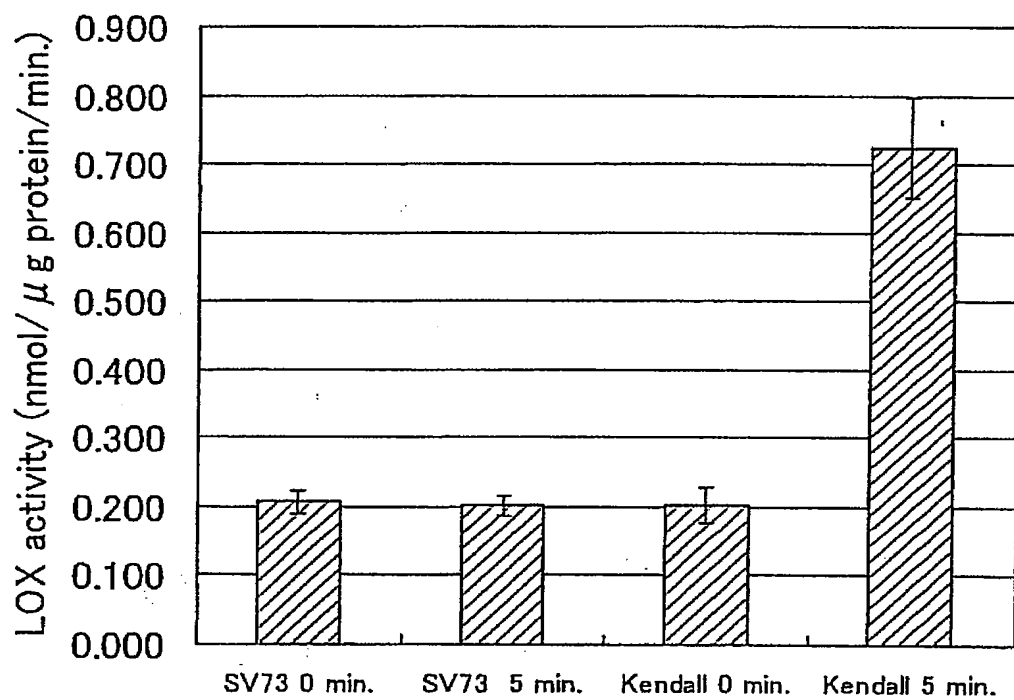


Fig. 2

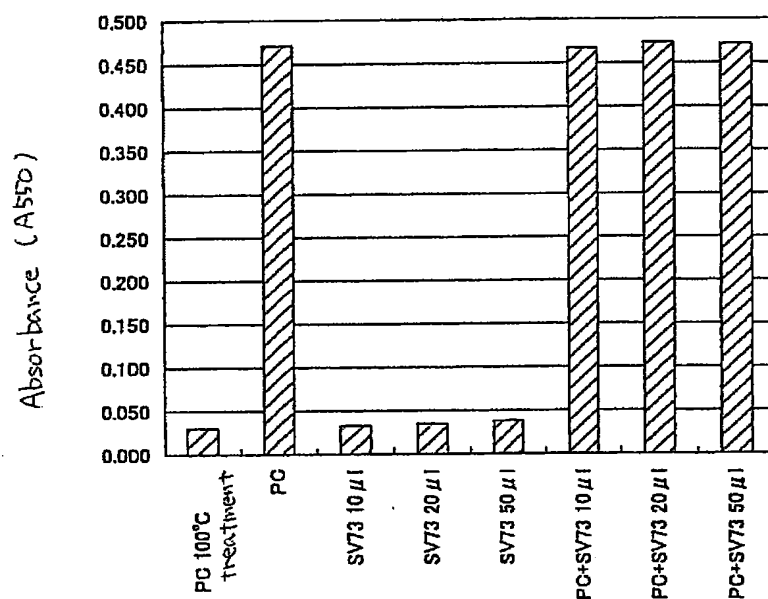


Fig. 3

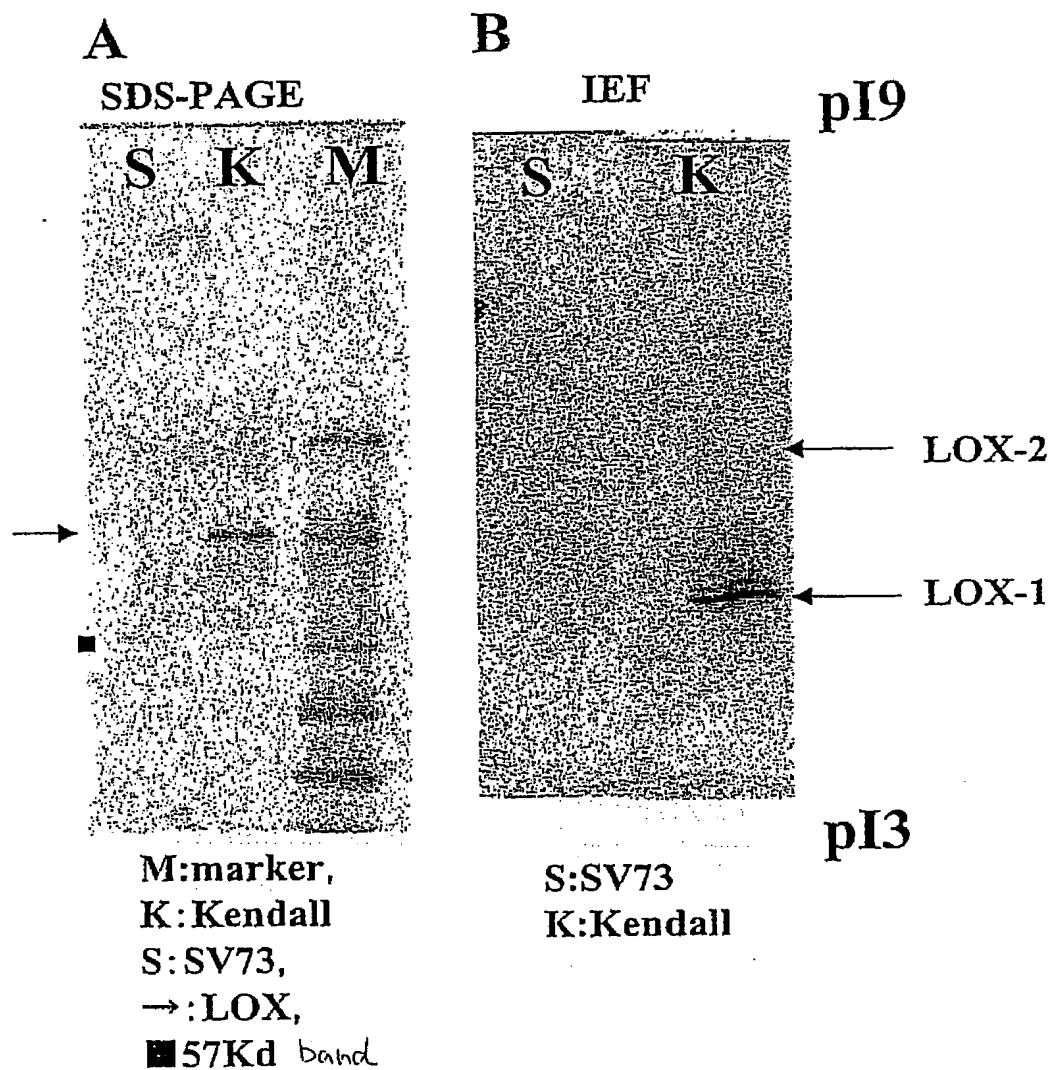


Fig. 4

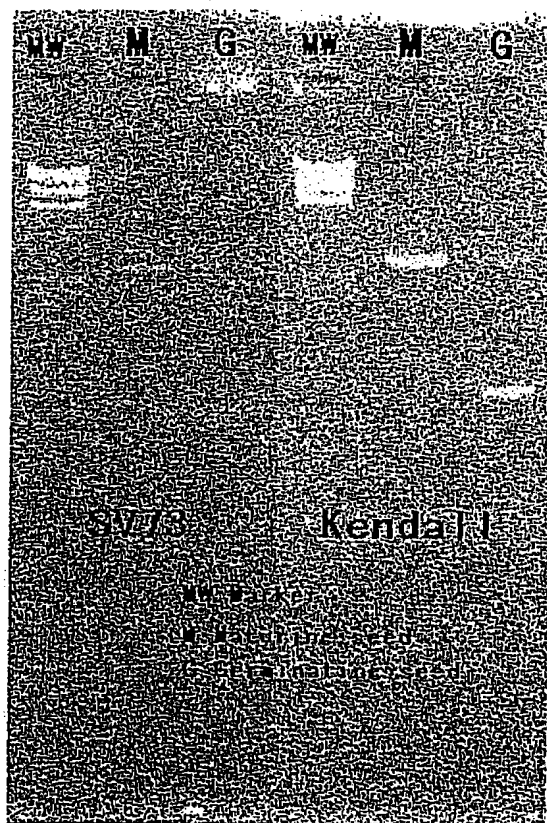
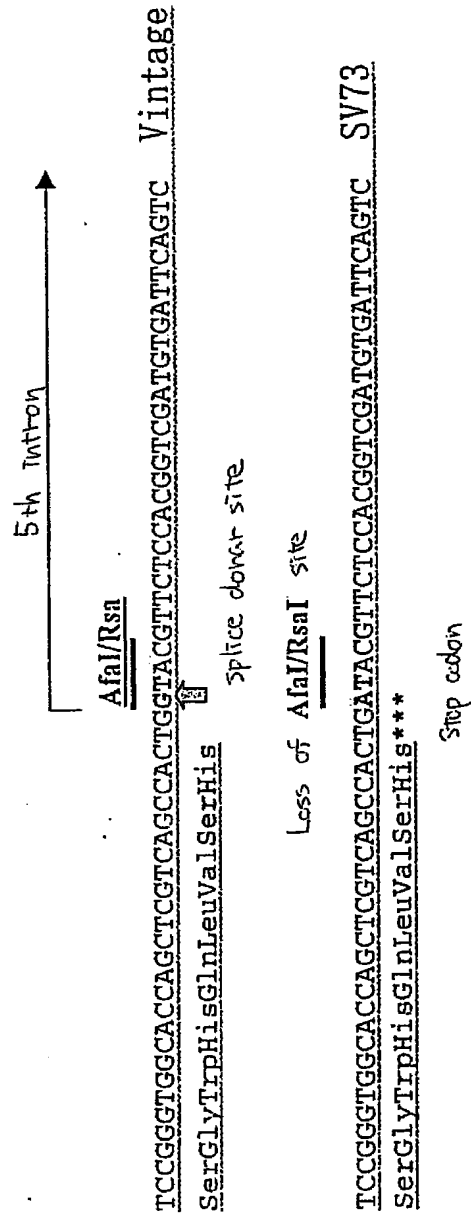
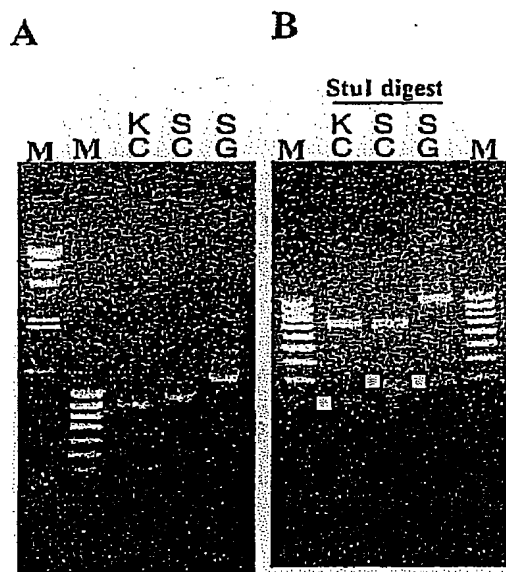


Fig. 5



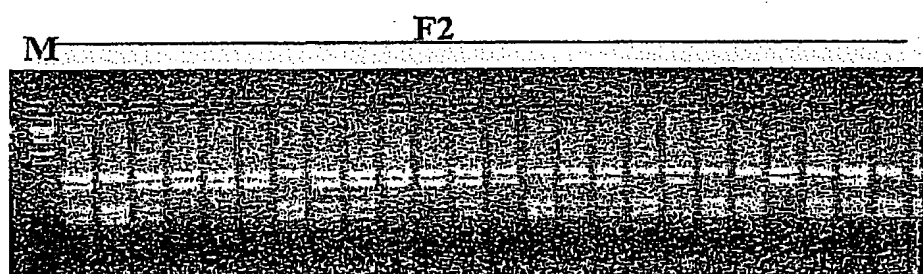
Nucleotide sequence of Lox-1 gene,
the regions of 5th intron splice donor site

Fig. 6



M: Marker,
KC: Kendall cDNA template
SC: SV73 cDNA template
SG: SV73 genomicDNA template

Fig. 7



M:Marker

F2:Kendall x SV73 F2 DNA AfaI method analysis

Fig. 8

F2	No.	LOX	AfaI	JBC970	F2	No.	LOX	AfaI	JBC970
			CAPS	Southern				CAPS	Southern
	1	+	KB	KB		73	+	KB	KB
	2	+	KK	KK		74	+	KB	KB
	3	+	KB	KB		75	+	KK	KK
	4	-	BB	KB		76	+	KB	KB
	5	-	BB	BB		77	+	KK	KK
	6	-	BB	BB		78	-	BB	BB
	7	+	KK	KK		79	+	KB	KB
	8	+	KB	KB		80	-	BB	BB
	9	+	KB	KB		81	-	BB	BB
	10	-	BB	BB		82	+	KB	KB
	11	-	BB	KB		83	+	KK	KK
	12	+	KB	KB		84	+	KK	KK
	13	-	BB	BB		85	-	BB	BB
	14	+	KK	KK		86	-	BB	BB
	15	+	KB	KB		87	-	BB	BB
	16	+	KB	KB		88	+	KB	KB
	17	+	KK	KK		89	-	BB	BB
	18	+	KB	KB		90	-	BB	BB
	19	+	KK	KK		91	+	KK	KK
	20	+	KK	KK		92	+	KB	KB
	21	-	BB	KB		93	+	KB	KB
	22	+	KK	KK		94	+	KK	KK
	23	+	KB	KB		95	+	KB	KB
	24	+	KK	KK		96	+	KB	KB
	25	+	KB	KB		97	+	KK	KK
	26	+	KB	KB		98	+	KB	KB
	27	+	KK	KK		99	+	KB	KB
	28	+	KK	KK		100	+	KB	KB
	29	+	KK	KK		101	-	BB	BB
	30	+	KB	KB		102	+	KB	KB
	31	+	KB	KB		103	+	KB	KB
	32	-	BB	KB		104	+	KB	KB
	33	+	KB	KB		105	+	KB	KB
	34	+	KB	KB		106	+	KK	KK
	35	+	KK	KB		107	+	KK	KK
	36	+	KB	KB		108	+	KK	KK
	37	+	KB	KB		109	+	KB	KB
	38	+	KK	KK		110	-	BB	BB
	39	+	KB	-		111	-	BB	BB
	40	+	KB	-		112	+	KB	KB
	41	-	BB	BB		113	+	KB	KB
	42	+	KB	KB		114	+	KB	KB
	43	+	KK	KK		115	-	BB	BB
	44	+	KB	KB		116	+	KB	KB
	45	-	BB	BB		117	-	BB	BB
	46	+	KK	KK		118	+	KK	KK
	47	-	BB	BB		119	+	KB	KB
	48	+	KK	KB		120	+	KK	KK
	49	+	KB	KB		121	+	KB	KB
	50	-	BB	BB		122	+	KB	KB
	51	+	KB	KB		123	+	KK	KK
	52	+	KB	KB		124	+	KB	KB
	53	+	KK	KK		125	-	BB	BB
	54	-	BB	BB		126	+	KK	KK
	55	+	KK	KK		127	+	KB	KB
	56	-	BB	BB		128	+	KB	BB
	57	+	KB	KB		129	+	KB	KB
	58	+	KB	KB		130	+	KB	KB
	59	-	BB	BB		131	+	KK	KB
	60	-	BB	BB		132	+	KK	KK
	61	+	KK	KK		133	-	BB	BB
	62	+	KK	KK		134	-	BB	BB
	63	+	KK	KK		135	+	KK	KK
	64	+	KB	KB		136	+	KB	KB
	65	+	KB	KB		137	+	KB	KK
	66	+	KK	KK		138	+	KB	KB
	67	+	KB	KB		139	-	BB	BB
	68	+	KK	KK		140	+	KK	KK
	69	+	KB	KB		141	+	KB	KB
	70	-	BB	BB		142	+	KB	BB
	71	+	KB	KB		143	+	KK	KK
	72	-	BB	BB		144	+	KB	KB

Fig. 9

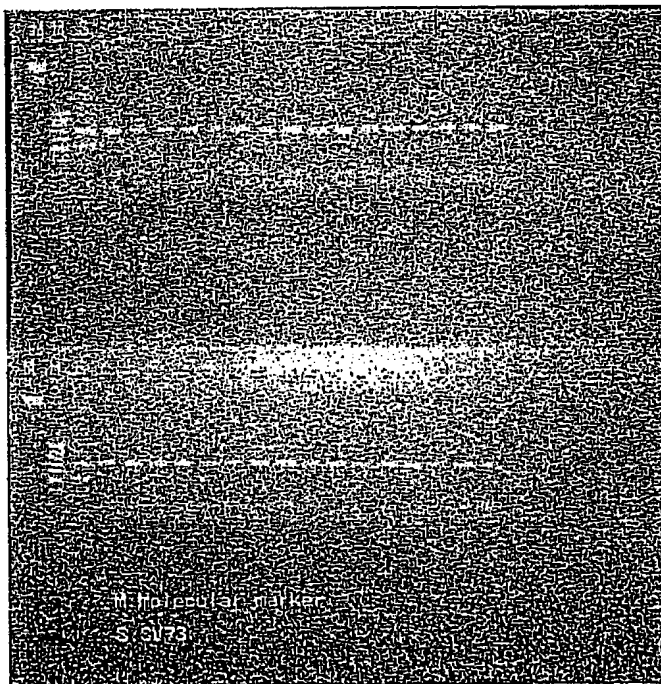
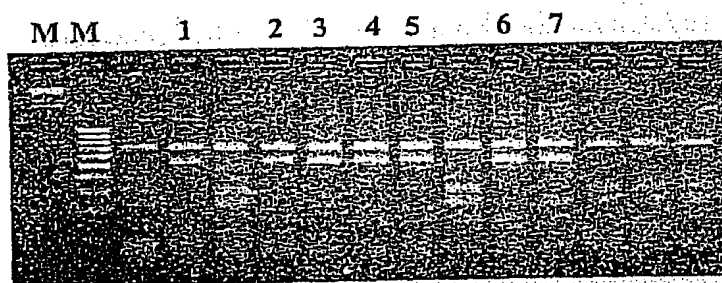


Fig. 10



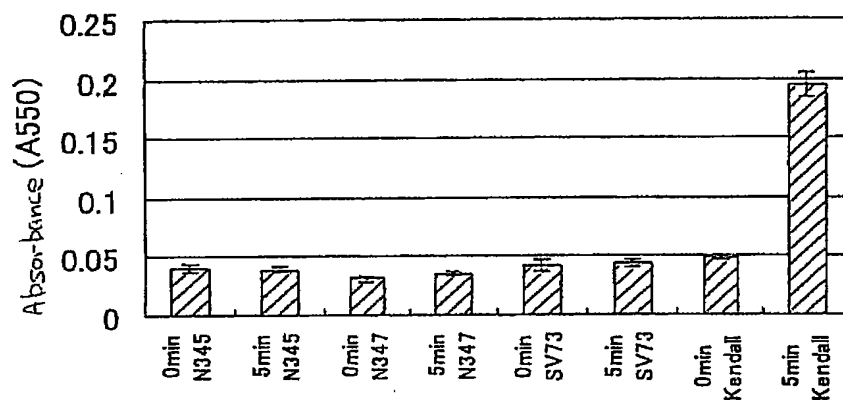
M: Marker,

1 and 5: SV73, 2: OUN345, 3: OUN347

4: OUI001, 6: OUJ095, 7: OUJ695

Fig. 11

A



B

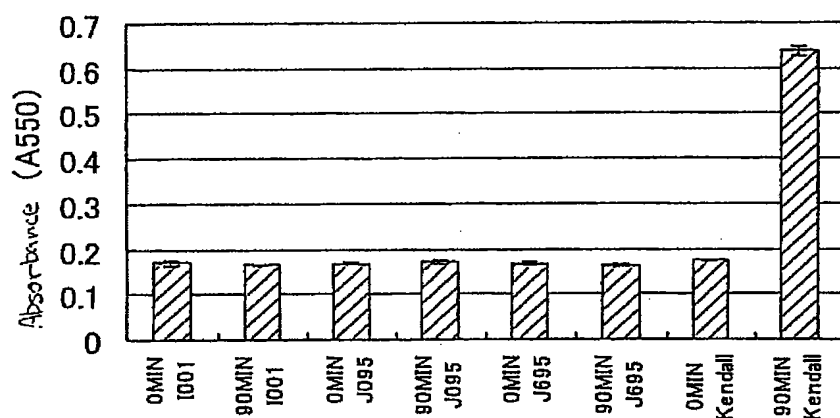


Fig. 12

Variety	LOX+F4	LOX-F4
Barley moisture content (%)	10.9	11
Barley weight (g)	3000	3000
Steeping (%)	44.8	44.5
Steeping time (h)	82	82
Malt yield weight (g)	2571.6	2572.2
Malt yield percent (%ad)	85.7	85.7
Malt yield percent (%db)	90.3	90.7
Moisture content (%)	6.1	5.8
Mashing time (min)	9-15	9-15
Lautering speed (min)	8	17
Transparency	2	2
Color (EBC)	2.1	2.2
Boiling color (EBC)	3.2	3.3
Air-dried extract (%)	67	69.3
Anhydrous extract (%)	71.4	73.5
TN (%)	2.49	2.291
SN (%)	0.648	0.645
Crude protein (%)	15.6	14.3
KZ	26	28.1
EVG (%)	78.8	79
DP (°WK)	348	377
DP (WK/TN)	140	165
Viscosity (mPa·s)	1.87	1.89
β-glucan (mg/l)	427	392
pH	5.97	6
Extract yield (%)	64.5	66.7

Fig. 13

